

REMARKS

Reconsideration based on the previous amendments and following remarks is respectfully requested.

Claims 1-14 are pending. By this Amendment, claims 2, 4, 8, 9, 10 and 12 are amended and new claim 14 is added.

The Office Action rejects claims 1-3, 5, 10, 11 and 13 under 35 U.S.C. §102(b) over JP 11-23179 to Kusahara; rejects claims 8 and 9 under 35 U.S.C. §103(a) over Kusahara in view of JP 2002-213764 to Futagami; rejects claims 8 and 9 under 35 U.S.C. §103(a) over Futagami in view of JP 10-038302 to Itagaki; rejects claim 6 under 35 U.S.C. §103(a) over Kusahara in view of JP 2003-028594 to Kitazawa et al.; rejects claim 7 under 35 U.S.C. §103(a) over Kusahara in view of JP 11-281280 to Mukoda et al.; and rejects claims 4 and 12 under 35 U.S.C. §103(a) over Kusahara in view of JP 04-020792 to Ogawa et al. These rejections are respectfully traversed.

Applicants' independent claim 1 is directed to an indoor unit of an air conditioner. A plurality of fin-tube type heat exchangers are arranged to surround a fan and an air pressure loss of an adjacent heat exchanger disposed adjacent to an air inlet, is larger than the air pressure loss of a remote heat exchanger that is disposed further from the air inlet than the adjacent heat exchanger.

As described in Applicants' specification in a non-limiting example, air does not pass through the front panel 8. Therefore, in a case in which louvered portions are provided in the lower front heat exchanger 4a, as in the upper front heat exchanger 4b and the rear heat exchanger 4c, the wind velocity near the lower front heat exchanger 4a is much lower than near the other heat exchangers 4b and 4c.

When the lower front heat exchanger 4a does not have louvered portions, the air pressure loss of the lower front heat exchanger 4a disposed remotely from the air inlet 7, is smaller than the air pressure losses of the upper front heat exchanger 4b and the lower rear heat exchanger 4c disposed near the air inlet 7. Because the air pressure loss of the lower front heat exchanger 4a is smaller than those of the upper front heat exchanger 4b and the rear heat exchanger 4c, the wind velocity on the lower side of the heat exchanger increases and the intensity of the turbulence generated around the vortex in the circulating fan increases. Thus, the static pressure in the vortex decreases and the efficiency of the circulating fan increases.

The Examiner alleges that Kusuhara discloses that the air pressure loss of an adjacent heat exchanger disposed adjacent the upper inlet is larger than the air pressure loss over remote heat exchanger. However, the Examiner provides no support for this allegation. The Examiner has not identified what arrangement in Kusuhara would lead the air pressure loss of a heat exchanger disposed adjacent to the upper inlet being larger than the air pressure loss of the remote heat exchanger. In the event the Examiner continues to assert that Kusuhara discloses this feature, the Examiner is asked to point out with specifically where this feature is disclosed in Kusuhara.

Applicants' independent claim 8 is directed to an indoor unit of an air conditioner. A plurality of fin-tube type heat exchangers include an adjacent heat exchanger disposed adjacent to an air inlet and a remote heat exchanger disposed further from the air inlet than the adjacent heat exchanger. An auxiliary heat exchanger is provided on an air upstream side of the remote heat exchanger. A front panel is formed in the indoor unit through which no air passes. A space is

provided below the front panel opposite the auxiliary heat exchanger to pass air therethrough.

Futagami discloses an air conditioner having a base with suction openings 4 formed in the front top and the upper surface of the main part 1 including the front panel 3.

Likewise, Kusuhara discloses in Fig. 12 suction openings 105 formed in a top portion and a front panel portion. Thus, Applicants' independent claim 8 is distinguishable over Futagami as well as Kusuhara in view of Futagami.

The dependent claims are allowable for at least the reasons discussed above as well as for the individual features they recite. For example, Applicants' dependent claims 4 and 12 each recite each of the plate fins in remote heat exchangers has louvered portions on an upstream and a downstream side in a row direction at an uppermost end portion and a middle portion but at the lowermost end portion of each plate fin in the remote heat exchanger, a louvered portion is provided only on the most downstream side in a row direction. This combination of features is not disclosed in either Kusuhara or Ogawa.

The Itagaki, Kitazawa and Mukoda references do not overcome the deficiencies of Kusuhara, Futagami and Ogawa noted above.

Early and favorable action with respect to this application is respectfully requested.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application, the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: May 13, 2010

By: _____



Michael Britton

Registration No. 47260

Customer No. 21839
703 836 6620